AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of indexing a substrate relative to a printhead between printing consecutive transverse scans of the printhead in the printing of an image on the substrate, the method comprising:

indexing the substrate to move the substrate longitudinally an incremental distance;

measuring the actual distance moved by the substrate during the indexing and determining from the measuring the difference between the actual distance moved by the substrate and the incremental distance; and

in response to the difference, adjusting the longitudinal position of the printhead.

2. (Original) The method of claim **1** wherein:

the indexing of the substrate is carried out by driving a feed element an amount predetermined to move the substrate longitudinally the incremental distance through a printing station.

3. (Original) The method of claim **1** further comprising:

scanning transversely with the printhead in the adjusted longitudinal position.

4. (Currently Amended) The method of claim **1** further comprising:

printing a second of the consecutive transverse scans of the printhead by scanning transversely with the printhead in the adjusted longitudinal position; then,

between printing the second of the consecutive transverse scans of the printhead and a next consecutive transverse scan of the printhead in the printing of the image on the substrate, further indexing the substrate longitudinally the incremental distance modified by the amount that the longitudinal position of the printhead was adjusted.

5. (Original) The method of claim **1** further comprising:

the measuring the actual distance moved by the substrate includes measuring the distance relative to a fixed frame of a printing machine.

6. (Original) The method of claim **1** further comprising:

the measuring the actual distance moved by the substrate includes measuring the distance relative to the longitudinal position of the printhead.

7. (Currently Amended) A method of ink jet printing comprising:

ink jet printing, with a printhead at a printing station, a first row of an image transversely across a substrate that is stationary at a printing station;

then, feeding the substrate longitudinally through the printing station in response to a feed signal from a controller that is representative of a given feed distance, and measuring the actual distance that the substrate moves longitudinally when so fed;

then, calculating, as a correction distance, ~~the difference between~~ the given feed distance ~~and~~ less the measured actual distance;

then, moving the printhead longitudinally the correction distance;

then, ink jet printing a further row of the image transversely across a substrate, with the substrate stationary at a printing station.

8. (Currently Amended) The method of claim **7** further comprising:

after printing the further row of the image, further feeding the substrate longitudinally through the printing station in response to a feed signal from the controller, the feed signal being representative of a given feed distance less the calculated correction distance.

9. (Original) The method of claim **7** further comprising:

after printing the further row of the image, moving the printhead longitudinally to bring the printhead to a reference position;

further feeding the substrate longitudinally through the printing station in response to a feed signal from the controller that is representative of the given feed distance less the calculated correction distance and adjusted distance.

10. (Currently Amended) The method of any of ~~the above method~~ claims **1-6** or **20-21** wherein:

the adjusting includes moving the printhead longitudinally in the direction of the indexing when the ~~incremental~~ actual distance is greater than the ~~actual~~ incremental distance and ~~is~~ in a direction opposite the direction of the indexing when the ~~incremental~~ actual distance is less than the ~~actual~~ incremental distance.

11. (Currently Amended) The method of any of ~~the above method~~ claims **7** or **8** wherein:

the ink jet printing is carried out with the printhead moving transversely across a bridge and the printhead is moved longitudinally by moving the bridge relative to a fixed frame.

12. (Currently Amended) The method of any of ~~the above method~~ claims **7** or **8** wherein:

the ink jet printing is carried out with the printhead moving transversely across a bridge and the printhead is moved longitudinally by moving the printhead relative to the bridge.

13. (Currently Amended) An ink jet printing apparatus comprising:

a frame;

a bridge extending transversely across the frame and defining a printing station;

~~a motion system configured to move the printhead longitudinally relative to the frame;~~

a feed system configured to advance a substrate longitudinally through the printing station;

a printhead moveable transversely across the bridge to print a row of the image across the substrate at the printing station;

a motion system configured to move the printhead longitudinally relative to the frame;

a controller operable to activate the feed system to perform an indexing motion of the substrate longitudinally a predetermined distance through the printing station;

a web position measurement device operable to measure and communicate to the controller a signal corresponding to an actual distance moved by the substrate during the indexing motion; and

the controller being operable to activate the motion system to move the printhead longitudinally a correction distance corresponding to the ~~difference between~~ actual distance moved by the substrate during the indexing motion ~~and a~~ less the predetermined distance.

14. (Currently Amended) The apparatus of claim **13** wherein:

the bridge is longitudinally moveable relative to the frame by the motion system; and

the controller is operable to activate the motion system to move the bridge longitudinally relative to the frame to thereby move the printhead longitudinally the correction distance ~~corresponding to the difference between actual distance moved by the substrate during the indexing motion and a predetermined distance~~.

15. (Original) The apparatus of claim **14** wherein:

the motion system includes a linear servo motor having a longitudinally extending stator fixed to the frame and an armature fixed to the bridge and responsive to the controller.

16. (Currently Amended) The apparatus of claim **13** wherein:

the printhead is longitudinally moveable relative to the bridge by the motion system; and

the controller is operable to activate the motion system to move the printhead longitudinally relative to the bridge to thereby move the printhead longitudinally the correction distance ~~corresponding to the difference between actual distance moved by the substrate during the indexing motion and a predetermined distance~~.

17. (Original) The apparatus of any of claims **13** through **16** wherein:

the web position measurement device includes an encoder responsive to the motion of the substrate relative thereto.

18. (Currently Amended) The apparatus of ~~any of~~ claims **13** ~~through 17~~ wherein:

the web position measurement device is fixed to the frame.

19. (Currently Amended) The apparatus of ~~any of~~ claims **13** ~~through 17~~ wherein:

the web position measurement device is fixed to the bridge.

20. (New) The method of claim **1** wherein:

the adjusting of the longitudinal position of the printhead is carried out by moving the bridge longitudinally relative to a fixed frame or moving the printhead longitudinally relative to the bridge.

21. (New) The method of claim **1** wherein:

the adjusting of the longitudinal position of the printhead is carried out by moving the bridge longitudinally relative to a fixed frame.